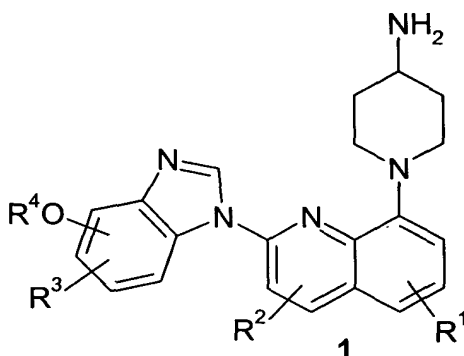


CLAIMS

1. A compound of the formula 1



- or a pharmaceutically acceptable salt, prodrug, hydrate or solvate thereof, wherein
- 5 each  $R^1$ ,  $R^2$ , and  $R^3$  is independently selected from H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_6$  cycloalkyl, halo, cyano,  $CF_3$ , difluoromethoxy, trifluoromethoxy,  $OC_1$ - $C_6$  alkyl,  $OC_3$ - $C_6$  cycloalkyl, and  $NR^7R^8$ ;
- wherein  $R^4$  is  $-(CR^5R^6)_nH$ , or  $-(CR^5R^6)_m$  (4 to 10 membered heterocyclic), wherein n is an integer ranging from 1 to 5, wherein m is an integer ranging from 0 to 5, wherein said 4 to 10 membered heterocyclic when aromatic is optionally substituted by 1 to 3  $R^1$  substituents,
- 10 and wherein said 4 to 10 membered heterocyclic when non-aromatic is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom;
- wherein each  $R^5$  and  $R^6$  is independently selected from H or  $C_1$ - $C_6$  alkyl;
- wherein each  $R^7$  and  $R^8$  is independently selected from H,  $C_1$ - $C_6$  alkyl, and  $C_3$ - $C_6$
- 15 cycloalkyl; and
- wherein each  $R^9$  is independently selected from halo, cyano,  $CF_3$ , difluoromethoxy, trifluoromethoxy,  $OC_1$ - $C_6$  alkyl,  $OC_3$ - $C_6$  cycloalkyl, and  $NR^7R^8$ .
2. The compound of claim 1, wherein each  $R^1$ ,  $R^2$ , and  $R^3$  is independently selected from H,  $C_1$ - $C_6$  alkyl, and  $C_3$ - $C_6$  cycloalkyl, halo, and cyano.
- 20 3. The compound of claim 1, wherein  $R^4$  is  $-(CR^5R^6)_nH$ .
4. The compound of claim 1, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 10 membered heterocyclic), wherein m is an integer ranging from 0 to 5 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly
- 25 attached to a heteroatom.
5. The compound of claim 4, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 10 membered heterocyclic), wherein m is an integer ranging from 0 to 3 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly
- 30 attached to a heteroatom.

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6. The compound of claim 5, wherein  $R^4$  is  $-(CH_2)_m$ (4 to 10 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 3 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 2  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

7. The compound of claim 6, wherein  $R^4$  is  $-(CH_2)_m$ (4 to 10 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 2 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

8. The compound of claim 7, wherein  $R^4$  is  $-(CH_2)_m$ (4 to 10 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

9. The compound of claim 8, wherein  $R^4$  is  $-(CH_2)_m$ (4 to 8 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 to 8 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

10. The compound of claim 9, wherein  $R^4$  is  $-(CH_2)_m$ (4 to 6 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 to 6 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1 to 2  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

11. The compound of claim 10, wherein  $R^4$  is  $-(CH_2)_m$ (6 membered heterocyclic), wherein  $m$  is 1 and wherein said 6 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1  $R^9$  substituent at any position not adjacent to or directly attached to a heteroatom.

12. The compound of claim 10, wherein  $R^4$  is  $-(CH_2)_m$ (5 membered heterocyclic), wherein  $m$  is 1 and wherein said 5 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1  $R^9$  substituent at any position not adjacent to or directly attached to a heteroatom.

13. The compound of claim 10, wherein  $R^4$  is  $-(CH_2)_m$ (4 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 membered heterocyclic group is optionally substituted by 1  $R^7$  substituent at any position and optionally substituted by 1  $R^9$  substituent at any position not adjacent to or directly attached to a heteroatom.

14. The compound of claim 4, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of pyrrolidinyl, tetrahydrofuranyl, tetrahydropyranyl, tetrahydrothiopyranyl, morpholino, and oxetanyl.

15. The compound of claim 4, wherein  $R^1$  is selected from the group consisting of H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_6$  cycloalkyl, halo, and cyano.

16. The compound of claim 15, wherein  $C_1$ - $C_6$  alkyl is selected from methyl, butyl, ethyl, propyl and pentyl.

5 17. The compound of claim 16, wherein  $C_1$ - $C_6$  alkyl is selected from methyl, butyl, ethyl, and propyl.

18. The compound of claim 17, wherein  $C_1$ - $C_6$  alkyl is selected from methyl, butyl, and ethyl.

19. The compound of claim 18, wherein  $C_1$ - $C_6$  alkyl is methyl.

10 20. The compound of claim 3, wherein each  $R^5$  and  $R^6$  is independently selected from methyl, ethyl, propyl and butyl.

21. The compound of claim 20, wherein each  $R^5$  and  $R^6$  is independently selected from methyl, and ethyl.

22. The compound of claim 21, wherein each  $R^5$  and  $R^6$  is methyl.

15 23. The compound of claim 4, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 8 membered heterocyclic), wherein m is an integer ranging from 0 to 3 and wherein said 4 to 8 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

20 24. The compound of claim 23, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 6 membered heterocyclic), wherein m is an integer ranging from 0 to 3 and wherein said 4 to 6 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

25 25. The compound of claim 24, wherein  $R^4$  is  $-(CR^5R^6)_m$  (6 membered heterocyclic), wherein m is an integer ranging from 0 to 3 and wherein said 6 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

30 26. The compound of claim 24, wherein  $R^4$  is  $-(CR^5R^6)_m$  (5 membered heterocyclic), wherein m is an integer ranging from 0 to 2 and wherein said 5 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

35 27. The compound of claim 24, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 membered heterocyclic), wherein m is an integer ranging from 0 to 2 and wherein said 4 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and

optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

28. The compound of claim 24, wherein said heterocyclic group of  $R^4$  contains one to four heteroatoms each selected from O, S and N, with the proviso that the 4 to 6 membered heterocyclic ring does not contain two adjacent O or S atoms.

29. The compound of claim 28 wherein said heterocyclic group of  $R^4$  contains one to four O atoms with the proviso that the ring does not contain two adjacent O atoms.

30. The compound of claim 29 wherein said heterocyclic group of  $R^4$  contains one to two O atoms with the proviso that the ring does not contain two adjacent O atoms.

31. The compound of claim 30 wherein said heterocyclic group of  $R^4$  contains one O atom.

32. The compound of claim 28 wherein said heterocyclic group of  $R^4$  contains one to four N atoms.

33. The compound of claim 32 wherein said heterocyclic group of  $R^4$  contains one to two N atoms.

34. The compound of claim 33 wherein said heterocyclic group of  $R^4$  contains one N atom.

35. The compound of claim 4, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 10 membered non-aromatic heterocyclic), wherein m is an integer ranging from 0 to 1 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

36. The compound of claim 35, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 8 membered non-aromatic heterocyclic), wherein m is an integer ranging from 0 to 1 and wherein said 4 to 8 membered non-aromatic heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

37. The compound of claim 36, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 6 membered non-aromatic heterocyclic), wherein m is an integer ranging from 0 to 1 and wherein said 4 to 6 membered non-aromatic heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

38. The compound of claim 37, wherein  $R^4$  is  $-(CR^5R^6)_m$  (6 membered non-aromatic heterocyclic), wherein m is an integer ranging from 0 to 1 and wherein said 6 membered non-aromatic heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

39. The compound of claim 37, wherein  $R^4$  is  $-(CR^5R^6)_m$  (5 membered non-aromatic heterocyclic), wherein  $m$  is an integer ranging from 0 to 1 and wherein said 5 membered non-aromatic heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

40. The compound of claim 37, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 membered non-aromatic heterocyclic), wherein  $m$  is an integer ranging from 0 to 1 and wherein said 4 membered non-aromatic heterocyclic group is optionally substituted by 1 to 3  $R^7$  substituents at any position and optionally substituted by 1 to 3  $R^9$  substituents at any position not adjacent to or directly attached to a heteroatom.

41. The compound of claim 4, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of azetidiny, thiazolyl, quinolinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothienyl, tetrahydropyranyl, tetrahydrothiopyranyl, piperidino, morpholino, thiomorpholino, piperaziny, homopiperaziny, oxetanyl, homopiperidinyl, indolinyl, dioxanyl, 3-azabicyclo[3.1.0]hexanyl, 3-azabicyclo[4.1.0]heptanyl, azabicyclo[2.2.2]hexanyl, and 3H-indolyl.

42. The compound of claim 4, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of pyridinyl, imidazolyl, pyrimidinyl, pyrazolyl, triazolyl, pyrazinyl, tetrazolyl, furyl, thienyl, isoxazolyl, thiazolyl, oxazolyl, isothiazolyl, pyrrolyl, quinolinyl, isoquinolinyl, indolyl, benzimidazolyl, benzofuranyl, cinnolinyl, indazolyl, indoliziny, phthalazinyl, pyridazinyl, triazinyl, isoindolyl, pteridinyl, purinyl, oxadiazolyl, thiadiazolyl, furazanyl, benzofurazanyl, benzothiophenyl, benzothiazolyl, benzoxazolyl, quinazolinyl, quinoxaliny, naphthyridinyl, and furopyridinyl.

43. The compound of claim 4, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of pyrrolidinyl, tetrahydrofuranyl, tetrahydropyranyl, tetrahydrothiopyranyl, piperidino, morpholino, piperaziny, homopiperaziny, azetidiny, oxetanyl, homopiperidinyl, 3-azabicyclo[3.1.0]hexanyl, 3-azabicyclo[4.1.0]heptanyl, azabicyclo[2.2.2]hexanyl, 3H-indolyl and quinoliziny.

44. The compound of claim 43, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of pyrrolidinyl, tetrahydrofuranyl, tetrahydropyranyl, tetrahydrothiopyranyl, morpholino, and oxetanyl.

45. The compound of claim 44, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of tetrahydrofuranyl, tetrahydropyranyl, tetrahydrothiopyranyl, morpholino, and oxetanyl.

46. The compound of claim 45, wherein said 4 to 10 membered heterocyclic is selected from the group consisting of tetrahydrofuranyl, morpholino, oxetanyl, and 4H-pyranyl.

47. The compound of claim 1, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 10 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 5 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

48. The compound of claim 47, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 10 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 3 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

49. The compound of claim 48, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 10 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 3 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1 to 2  $R^1$  substituents.

50. The compound of claim 49, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 10 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 2 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

51. The compound of claim 50, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 10 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 to 10 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

52. The compound of claim 51, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 8 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 to 8 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

53. The compound of claim 52, wherein  $R^4$  is  $-(CH_2)_m$  (4 to 6 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 to 6 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

54. The compound of claim 53, wherein  $R^4$  is  $-(CH_2)_m$  (6 membered heterocyclic), wherein  $m$  is 1 and wherein said 6 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

55. The compound of claim 54, wherein  $R^4$  is  $-(CH_2)_m$  (5 membered heterocyclic), wherein  $m$  is 1 and wherein said 5 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

56. The compound of claim 55, wherein  $R^4$  is  $-(CH_2)_m$  (4 membered heterocyclic), wherein  $m$  is 1 and wherein said 4 membered heterocyclic group is optionally substituted by 1  $R^1$  substituent.

57. The compound of claim 4, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 8 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 3 and wherein said 4 to 8 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

58. The compound of claim 57, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 to 6 membered heterocyclic), wherein  $m$  is an integer ranging from 0 to 3 and wherein said 4 to 6 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

59. The compound of claim 58, wherein  $R^4$  is  $-(CR^5R^6)_m$  (6 membered heterocyclic), wherein m is an integer ranging from 0 to 3 and wherein said 6 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

60. The compound of claim 59, wherein  $R^4$  is  $-(CR^5R^6)_m$  (5 membered heterocyclic), wherein m is an integer ranging from 0 to 2 and wherein said 5 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

61. The compound of claim 60, wherein  $R^4$  is  $-(CR^5R^6)_m$  (4 membered heterocyclic), wherein m is an integer ranging from 0 to 2 and wherein said 4 membered heterocyclic group is optionally substituted by 1 to 3  $R^1$  substituents.

62. The compound of claim 4, wherein said heterocyclic group of  $R^4$  contains one to four heteroatoms each selected from O, S and N, with the proviso that the 4 to 10 membered heterocyclic ring does not contain two adjacent O or S atoms.

63. The compound of claim 62 wherein said heterocyclic group of  $R^4$  contains one to four O atoms with the proviso that the ring does not contain two adjacent O atoms.

64. The compound of claim 63 wherein said heterocyclic group of  $R^4$  contains one to two O atoms with the proviso that the ring does not contain two adjacent O atoms.

65. The compound of claim 64 wherein said heterocyclic group of  $R^4$  contains one O atom.

66. The compound of claim 65 wherein said heterocyclic group of  $R^4$  contains one to four N atoms.

67. The compound of claim 66 wherein said heterocyclic group of  $R^4$  contains one to two N atoms.

68. The compound of claim 67 wherein said heterocyclic group of  $R^4$  contains one N atom.

69. A compound according to claim 1 selected from the group consisting of:

1-{2-[5-(3-Morpholin-4-yl-propoxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine;

(+)-1-{2-[5-(Tetrahydro-furan-3-yloxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine;

1-{2-[5-(3-Methyl-oxetan-3-ylmethoxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine;

1-[2-(5-Isobutoxy-benzoimidazol-1-yl)-quinolin-8-yl]-piperidin-4-ylamine;

1-{2-[5-(Tetrahydro-pyran-4-yloxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine; and the pharmaceutically acceptable salts, prodrugs, hydrates and solvates of the

foregoing compounds.

70. A compound according to claim 69 selected from the group consisting of:

1-{2-[5-(3-Morpholin-4-yl-propoxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine;

(+)-1-{2-[5-(Tetrahydro-furan-3-yloxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine;

(-)-1-{2-[5-(Tetrahydro-furan-3-yloxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine; and the pharmaceutically acceptable salts, prodrugs, hydrates and solvates of the foregoing compounds.

71. A compound according to claim 70, selected from the group consisting of: 1-{2-[5-(3-Morpholin-4-yl-propoxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine; and the pharmaceutically acceptable salts, prodrugs, hydrates and solvates of the foregoing compound.

72. A compound according to claim 69, selected from the group consisting of: 1-{2-[5-(3-Methyl-oxetan-3-ylmethoxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine; and the pharmaceutically acceptable salts, prodrugs, hydrates and solvates of the foregoing compound.

73. A compound according to claim 69, selected from the group consisting of: 1-[2-(5-Isobutoxy-benzoimidazol-1-yl)-quinolin-8-yl]-piperidin-4-ylamine; and the pharmaceutically acceptable salts, prodrugs, hydrates and solvates of the foregoing compound.

74. A compound according to claim 69, selected from the group consisting of: 1-{2-[5-(Tetrahydro-pyran-4-yloxy)-benzoimidazol-1-yl]-quinolin-8-yl}-piperidin-4-ylamine; and the pharmaceutically acceptable salts, prodrugs, hydrates and solvates of the foregoing compound.

75. A compound according to claim 69, wherein said salt is the benzenesulfonate salt.

76. A compound according to claim 70, wherein said salt is the benzenesulfonate salt.

77. A compound according to claim 71, wherein said salt is the benzenesulfonate salt.

78. A compound according to claim 72, wherein said salt is the benzenesulfonate salt.

79. A compound according to claim 73, wherein said salt is the benzenesulfonate salt.

80. A compound according to claim 74, wherein said salt is the benzenesulfonate salt.

81. A method for the treatment of abnormal cell growth in a mammal comprising administering to said mammal an amount of a compound of claim 1 that is effective in treating abnormal cell growth.

82. A method according to claim 81, wherein said abnormal cell growth is cancer.



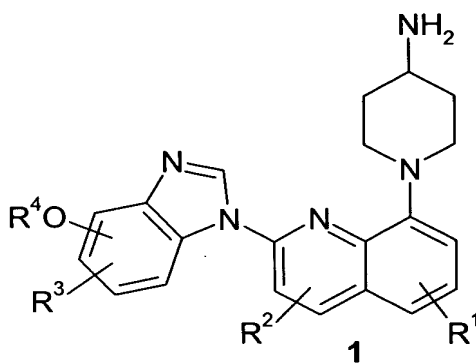
83. A method according to claim 82, wherein said cancer is selected from lung cancer, bone cancer, pancreatic cancer, gastric, skin cancer, cancer of the head or neck, cutaneous or intraocular melanoma, uterine cancer, ovarian cancer, gynecological, rectal cancer, cancer of the anal region, stomach cancer, colon cancer, breast cancer, uterine cancer, carcinoma of the fallopian tubes, carcinoma of the endometrium, carcinoma of the cervix, carcinoma of the vagina, carcinoma of the vulva, Hodgkin's Disease, cancer of the esophagus, cancer of the small intestine, cancer of the endocrine system, cancer of the thyroid gland, cancer of the parathyroid gland, cancer of the adrenal gland, sarcoma of soft tissue, cancer of the urethra, cancer of the penis, squamous cell, prostate cancer, chronic or acute leukemia, lymphocytic lymphomas, cancer of the bladder, cancer of the kidney or ureter, renal cell carcinoma, carcinoma of the renal pelvis, neoplasms of the central nervous system (CNS), primary CNS lymphoma, spinal axis tumors, brain, pituitary adenoma, or a combination of one or more of the foregoing cancers.
84. A method according to claim 83, wherein said cancer is selected from the group consisting of brain, squamous cell, bladder, gastric, pancreatic, breast, head, neck, oesophageal, prostate, colorectal, lung, renal, kidney, ovarian, gynecological and thyroid cancer.
85. A method according to claim 84, wherein said cancer is selected from the group consisting of prostate, breast, lung, colon and ovarian cancer.
86. A method according to claim 85, wherein said cancer is selected from the group consisting of prostate, breast, and lung cancer.
87. A method according to claim 86, wherein said breast cancer is metastatic breast cancer.
88. A method according to claim 86, wherein said lung cancer is non-small cell lung cancer.
89. A method according to claim 81, wherein said abnormal cell growth is non-cancerous.
90. A method according to claim 89, wherein non-cancerous abnormal cell growth is benign hyperplasia of the skin or prostate.
91. A method for the treatment of vasculogenesis, restenosis, atherosclerosis or angiogenesis in a mammal comprising administering to said mammal a therapeutically effective amount of a compound of formula 1, or a pharmaceutically acceptable salt, prodrug or hydrate 1 that is effective in treating vasculogenesis, restenosis, atherosclerosis or angiogenesis.
92. The method of claim 91, wherein said method is for treating vasculogenesis or angiogenesis.
93. A method for the treatment of a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of

formula 1, or a pharmaceutically acceptable salt, prodrug or hydrate in combination with an anti-tumor agent selected from the group consisting of mitotic inhibitors, alkylating agents, anti-metabolites, intercalating antibiotics, growth factor inhibitors, cell cycle inhibitors, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones, angiogenesis inhibitors, and anti-androgens.

94. A pharmaceutical composition for the treatment of abnormal cell growth in a mammal comprising an amount of a compound of claim 1 that is effective in treating abnormal cell growth, and a pharmaceutically acceptable carrier.

95. The pharmaceutical composition of claim 94 wherein said abnormal cell growth is cancer.

96. A process of preparing a compound of the formula 1



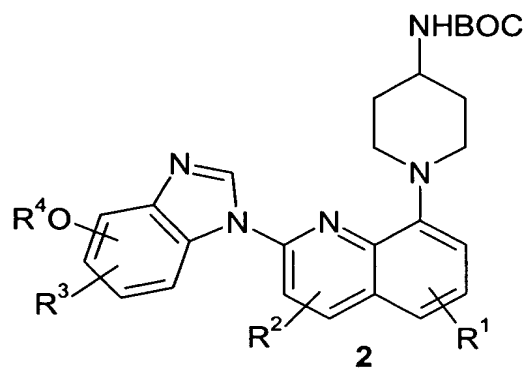
or a pharmaceutically acceptable salt, prodrug, hydrate or solvate thereof, wherein each R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, halo, cyano, CF<sub>3</sub>, difluoromethoxy, trifluoromethoxy, OC<sub>1</sub>-C<sub>6</sub> alkyl, OC<sub>3</sub>-C<sub>6</sub> cycloalkyl, and NR<sup>7</sup>R<sup>8</sup>;

wherein R<sup>4</sup> is -(CR<sup>5</sup>R<sup>6</sup>)<sub>n</sub>H, or -(CR<sup>5</sup>R<sup>6</sup>)<sub>m</sub>(4 to 10 membered heterocyclic), wherein n is an integer ranging from 1 to 5, wherein m is an integer ranging from 0 to 5, wherein said 4 to 10 membered heterocyclic when aromatic is optionally substituted by 1 to 3 R<sup>1</sup> substituents, and wherein said 4 to 10 membered heterocyclic when non-aromatic is optionally substituted by 1 to 3 R<sup>7</sup> substituents at any position and optionally substituted by 1 to 3 R<sup>9</sup> substituents at any position not adjacent to or directly attached to a heteroatom;

wherein each R<sup>5</sup> and R<sup>6</sup> is independently selected from H or C<sub>1</sub>-C<sub>6</sub> alkyl

wherein each R<sup>7</sup> and R<sup>8</sup> is independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, and C<sub>3</sub>-C<sub>6</sub> cycloalkyl; and

wherein each R<sup>9</sup> is independently selected from halo, cyano, CF<sub>3</sub>, difluoromethoxy, trifluoromethoxy, OC<sub>1</sub>-C<sub>6</sub> alkyl, OC<sub>3</sub>-C<sub>6</sub> cycloalkyl, and NR<sup>7</sup>R<sup>8</sup> which comprises treating a compound of the formula 2



wherein  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are as defined above for the compound of formula 1 with an acid to give a compound of the formula 1.